Comparisons of Forward, Inverse Helioseismic and Diffusion Solar Models

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Published solar model element abundance profiles from an helioseismic solar model and a diffusion model are used in the author's solar structure program. The resulting models are compared with a standard model without diffusion and the author's high-Z core. Low degree and low order oscillation frequencies are compared with observed frequencies. In addition, relative model differences for speeds of sound, densities and gamma-1 functions are calculated and compared. It is shown that there are good agreements of relative differences between the seismic model and the high-Z core and diffusion models. But since the high-Z core model is the only model consistent with current solar neutrino experiment results, it is seen as the model closes to the real Sun.